



SDMS Doc ID 165981

# Water Issues

Vital Information on Water Issues Winter 1999

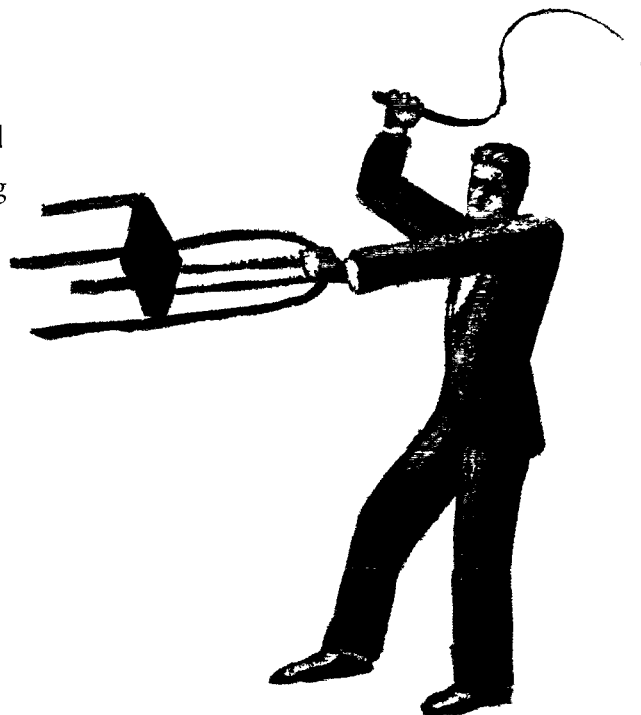
## New Treatment Technology Put To Work

### Taming A New Water Quality Challenge

Until recently, San Gabriel Valley water agencies believed that our groundwater cleanup challenges had been tamed. Over 20 water treatment plants were treating billions of gallons of water per year, and the funding and know-how were available to continue the progress.

Then, two new contaminants were discovered in limited areas of the San Gabriel Valley Groundwater Basin that could not be removed using existing treatment facilities. The new contaminants are Perchlorate, a rocket fuel ingredient, and NDMA, an industrial chemical. As a result of this discovery, operation of a number of treatment plants and wells had to be suspended.

A successful effort to develop a practical method to treat the new contaminants was promptly sponsored by local water agencies. Another team effort obtained the necessary funding, and local water agencies are now proceeding rapidly with the construction of treatment facilities using the new technology. ♦



In the short space of less than a year, San Gabriel Valley water agencies sponsored development of the first technology to remove Perchlorate and NDMA from drinking water. Local water agencies have secured millions of dollars in cleanup funding to develop a major treatment project with the new technology and thereby tame this recent water quality challenge.

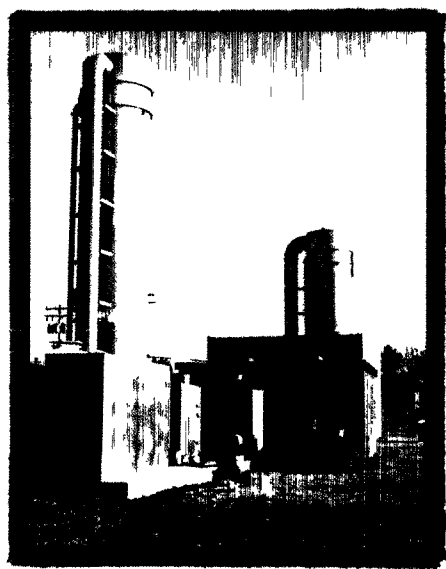


San Gabriel Valley Water Association

## Some Background Information

Although the Perchlorate and NDMA problems have only been found in limited areas, they have forced the suspension of treatment operations in the largest area of contamination in the Basin, the Baldwin Park Operable Unit. These contaminants also caused the shutdown of the drinking water wells of a local water agency.

In response, new treatment facilities are now being developed to provide a clean source of supply for the water district that lost its wells, and to prevent the spread of contaminants. ♦



Operation of a number of existing treatment facilities, like the one shown here, have been temporarily suspended because they are not designed to remove Perchlorate. Water treatment will resume as soon as the first treatment plant using the new technology is constructed.

# New Technology And Cooperative Agreements

Solving Recent Cleanup Challenges

### Quick Pace

Developing new treatment facilities to address the recently discovered Perchlorate and NDMA contamination would have required the U.S. Environmental Protection Agency to go through a long and slow review and funding process. To speed the pace, local agencies worked with the businesses held responsible for the contamination to develop a cooperative project that could be implemented rapidly.

### Funding Pledge

Key to the cooperative agreement was funding pledges between two local water agencies, the Main San Gabriel Basin Watermaster and the San Gabriel Basin Water Quality Authority, with each contributing one-half million dollars. The businesses agreed to add \$3.5 million, and a \$1.5 million grant is expected from the U.S. Bureau of Reclamation.

### Part of Larger Cleanup Plan

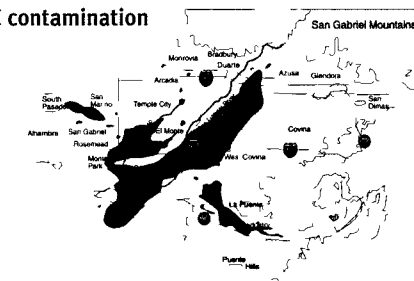
The new treatment plant will be the first full-scale facility in the country capable of removing Perchlorate and NDMA from drinking water. More treatment units using the same technology are planned. ♦

## Additional Experiment To Be Tested

In addition to the technology sponsored by San Gabriel Valley water agencies, an experimental pilot treatment plant sponsored by the business community will also be tested. It utilizes bacteria to literally break down the contaminants in a bioreactor. This treatment process is completed by exposure to ultraviolet light, oxidation by hydrogen peroxide, contact with granular activated carbon and finally disinfection.

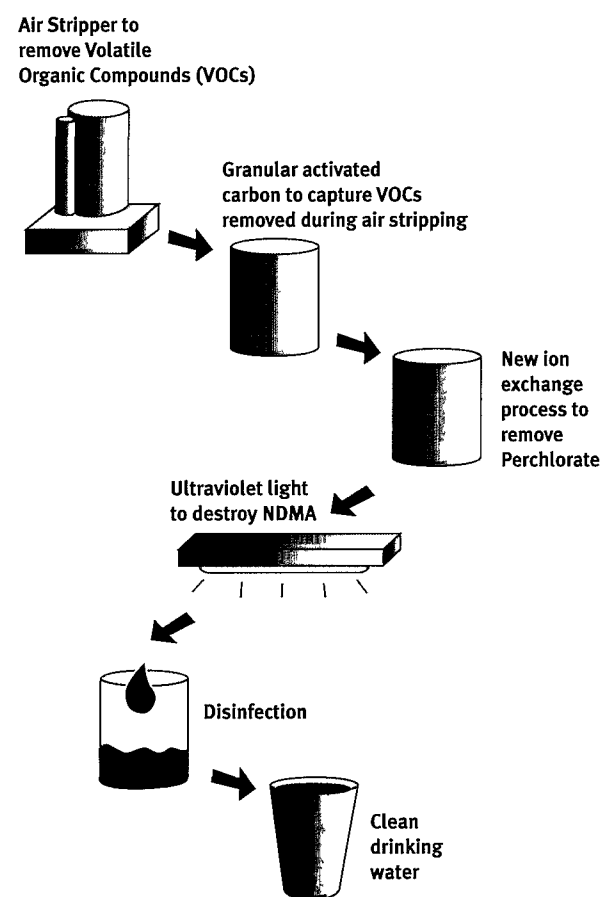
By cooperating to develop each other's technologies, the water industry and involved businesses are accelerating the research process and saving money. ♦

Locations of VOC contamination



Placement of the new treatment technology for removing Perchlorate and NDMA is being focused on locations with existing treatment facilities for Volatile Organic Compounds (VOCs). Removing the Perchlorate will permit the VOC treatment units to begin operation again and stop the downstream migration of the contaminants.

### How The New Treatment Process Produces Quality Drinking Water



# Why We Brought You This Message

The San Gabriel Valley's underground water supply is high quality. If problems arise, water agencies promptly take responsibility by treating water, or when necessary, shutting down affected wells, and utilizing research, leadership, funding, and technical know-how to promote cleanup. This edition of *Water Issues* provides information about how the water community sponsored development of the first effective treatment process for Perchlorate, raised millions of dollars in funding and quickly developed a cleanup plan that is already underway. ♦

## Legislator Retires Recognized For Local Water Contributions



Congressman Torres, (right) with San Gabriel Valley Water Association past President David De Jesus.

Congressman Esteban Torres recently retired and

was recognized for his contributions to the water community with a dinner given in his honor. His most notable water related achievements include initiating the Basin's successful cleanup efforts. He brought the involved parties together and helped to obtain funding for groundwater cleanup projects. Congressman Torres was also instrumental in helping to shut down the ALR landfill in Azusa. Our water community thanks him for his leadership and friendship to the San Gabriel Valley. ♦

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